

AMENDMENTS TO THE CLAIMS

Please amend claims 1-34, and insert new claims 35-40, as follow. A complete listing of the claims is provided below.

1. (Currently Amended) A hearing aid comprising:
a transceiver for interconnection of the hearing aid with a wireless network, and
a communication controller that is adapted for controlling data exchange through the network in accordance with a network protocol, ~~and~~
wherein the controller is further adapted for initialisation of the network in an acquisition mode by controlling the transceiver to transmit interrogation data repetitively, and
wherein the controller is further adapted to, upon receipt of an interrogation data received message from another device, in a connected mode acting act in a connected mode as a master of the network by repetitively ~~transmitting~~ controlling the transceiver to transmit synchronization data at intervals that are longer than ~~the~~ intervals between the transmitted interrogation data in the acquisition mode.
2. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the controller is further adapted to act as a slave in the network upon receipt of interrogation data from another hearing aid, the other hearing aid being the master of the network.
3. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the controller, in the acquisition mode, is further adapted to enable the ~~receiver~~ transceiver to receive data from the network in certain time periods during which transmission of synchronization data is inhibited.
4. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the controller is further adapted for selective operation of the transceiver in a plurality of frequency channels.
5. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the controller is further adapted for operation of the transceiver according to a time division multiplex scheme.

6. (Currently Amended) ~~A~~ The hearing aid according to claim 4, wherein the controller is further adapted for operation of the transceiver according to a frequency division multiplex scheme.
7. (Currently Amended) ~~A~~ The hearing aid according to claim 4, wherein the controller is further adapted for operation of the transceiver according to a spread spectrum scheme.
8. (Currently Amended) ~~A~~ The hearing aid according to claim 7, wherein the controller is further adapted for operation of the transceiver according to a frequency hopping scheme.
9. (Currently Amended) ~~A~~ The hearing aid according to claim 8, wherein a frequency hopping algorithm is provided that allows devices in the network to calculate what frequency channel the network will use at any given point in time without relying on ~~the~~ a history of the network.
10. (Previously Presented) ~~A~~ The hearing aid according to claim 1, wherein ~~one device when the controller acts as the master in the network is a master device, and~~ all other devices in the network synchronize to ~~the~~ a timing of the master ~~device~~ utilising the synchronization data.
11. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein a new device is automatically ~~recognized~~ recognizable by the network and interconnected with the network.
12. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the ~~controller~~ transceiver is further adapted for reception of data from devices that do not receive data from the network.
13. (Currently Amended) ~~A~~ The hearing aid according to claim 1, wherein the transceiver is for interconnection of the hearing aid with an additional hearing aid through the network, wherein the hearing aid and the additional hearing aid are parts of a binaural hearing aid system comprising a first and a second hearing aid according to claim 1 mutually interconnected for data exchange through the network.

14. (Currently Amended) A The hearing aid according to claim 1, further comprising a remote controller for a hearing aid and adapted to communicate with a hearing aid according to claim 1 communication with the transceiver through the wireless network.
15. (Currently Amended) A The hearing aid according to claim 1, wherein the transceiver is for communication with a fitting instrument for a hearing aid and adapted to communicate with a hearing aid according to claim 1 through the wireless network.
16. (Currently Amended) A The hearing aid according to claim 1, wherein the transceiver is for communication with a mobile phone adapted to communicate with a hearing aid according to claim 1 through the wireless network.
17. (Currently Amended) A The hearing aid according to claim 1, wherein the transceiver is for communication with a broadcast system adapted to communicate with a hearing aid according to claim 1 through the wireless network.
18. (Currently Amended) A binaural hearing aid system comprising:
a first and a second hearing aid that are interconnected for data exchange,
wherein the first and second hearing aid are interconnected through a wireless network,
and
wherein the first hearing aid is configured to act as a master of the wireless network to thereby perform data transmission more often than data reception.
19. (Currently Amended) A The binaural hearing aid system according to claim 18, wherein at least one of the first and second hearing aids further aid comprises:
a transceiver for interconnection of the hearing aid with a wireless network, and
a communication controller that is adapted for controlling data exchange through the network in accordance with a network protocol, ~~and~~
wherein the controller is further adapted for initialisation of the network in an acquisition mode by controlling the transceiver to transmit interrogation data repetitively, and
wherein the controller is further adapted to, upon receipt of an interrogation data received message from another device, act in a connected mode acting as a the master of the network by

repetitively ~~transmitting~~ controlling the transceiver to transmit synchronization data at intervals that are longer than ~~the~~ intervals between the transmitted interrogation data in the acquisition mode.

20. (Currently Amended) A The binaural hearing aid system according to claim 19, wherein the controller is further adapted to act as a slave in the network upon receipt of interrogation data from another hearing aid, the other hearing aid being the master of the network.

21. (Currently Amended) A The binaural hearing aid system according to claim 19, wherein the controller, in the acquisition mode, is further adapted to enable the ~~receiver~~ transceiver to receive data from the network in certain time periods during which transmission of synchronization data is inhibited.

22. (Currently Amended) A The binaural hearing aid system according to claim 19, wherein the controller is further adapted for selective operation of the transceiver in a plurality of frequency channels.

23. (Currently Amended) A The binaural hearing aid system according to claim 19, wherein the controller is further adapted for operation of the transceiver according to a time division multiplex scheme.

24. (Currently Amended) A The binaural hearing aid system according to claim 22, wherein the controller is further adapted for operation of the transceiver according to a frequency division multiplex scheme.

25. (Currently Amended) A The binaural hearing aid system according to claim 22, wherein the controller is further adapted for operation of the transceiver according to a spread spectrum scheme.

26. (Currently Amended) A The binaural hearing aid system according to claim 25, wherein the controller is further adapted for operation of the transceiver according to a frequency hopping scheme.

27. (Currently Amended) A The binaural hearing aid system according to claim 26, wherein a frequency hopping algorithm is provided that allows devices in the network to calculate what frequency channel the network will use at any given point in time without relying on ~~the~~ a history of the network.

28. (Currently Amended) A The binaural hearing aid system according to claim 18, wherein ~~one device~~ when the first hearing aid acts as the master in the network ~~is a master device, and~~ all other devices in the network synchronize to ~~the~~ a timing of the master ~~device~~ utilising the ~~synchronization data.~~

29. (Currently Amended) A The binaural hearing aid system according to claim 18, wherein a new device is automatically ~~recognized~~ recognizable by the network and interconnected with the network.

30. (Currently Amended) A The binaural hearing aid system according to claim 18, wherein the ~~controller~~ transceiver is further adapted for reception of data from devices that do not receive data from the network.

31. (Currently Amended) A The binaural hearing aid system according to claim 18, further comprising a remote controller for a binaural hearing aid system and adapted to communicate with a binaural hearing aid system according to claim 18 communication with the first hearing aid through the wireless network.

32. (Currently Amended) A The binaural hearing aid system of claim 18, wherein the first hearing aid is configured to communicate with a fitting instrument for a binaural hearing aid system and adapted to communicate with a binaural hearing aid system according to claim 18 through the wireless network.

33. (Currently Amended) A The binaural hearing aid system of claim 18, wherein the first hearing aid is configured to communicate with a mobile phone adapted to communicate with a binaural hearing aid system according to claim 18 through the wireless network.

34. (Currently Amended) A The binaural hearing aid system of claim 18, wherein the first hearing aid is configured to communicate with a broadcast system ~~adapted to communicate with a binaural hearing aid system according to claim 18~~ through the wireless network.
35. (New) The hearing aid according to claim 1, wherein the transceiver is configured to operate with a minimal reception time.
36. (New) The hearing aid according to claim 1, wherein the transceiver is configured to perform data transmission more often than data reception.
37. (New) The hearing aid according to claim 14, wherein the remote control is a slave.
38. (New) The hearing aid according to claim 15, wherein the fitting instrument is a slave.
39. (New) The hearing aid according to claim 16, wherein the mobile phone is a slave.
40. (New) The hearing aid according to claim 17, wherein the broadcast system is a slave.